USAID
FROM THE AMERICAN PEOPLE

ENVIRONMENTAL SCOPING STATEMENT:

FOR IDP DURABLE HOUSING ACTIVITY

GEORGIA MUNICIPAL INFRASTRUCTURE AND IDP HOUSING REHABILITATION PROJECT

DCN: 2010-GEO-021

Date: August 2011

DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government

TABLE OF CONTENTS

LIST OF FIGURES, TABLES AND BOXES

ABBREVIATIONS AND ACRONYMS

USAID	United States Agency for International Development
GoG	Government of Georgia
IDP	Internally Displaced Persons
MDF	Municipal Development Fund
EMMP	Environmental Mitigation and Monitoring Plan
MRA	Ministry of Internally Displaced Persons from the Occupied Territories, Accommodation and Refugees of Georgia
BEO	USAID Europe and Eurasia Bureau Environmental Officer
CFR	U.S. Code of Federal Regulations
EA	Environmental Assessment
M&E	Monitoring and Evaluation
M&M	Mitigation and Monitoring
PEA	Programmatic Environmental Assessment
MEO	USAID/Georgia Mission Environmental Officer
SS	Scoping Statement

1. BACKGROUND AND PURPOSE

In order to stimulate rural economic development and improve livelihoods of vulnerable populations, USAID/Georgia signed an agreement with the Government of Georgia (GoG) which aims to: (1) Assist over 80 local communities to prepare and implement community development, (2) Upgrade the existing shelters constructed by the GoG for Internally Displaced Persons (IDPs) from the 2008 conflict with Russia, and (3) Redevelop buildings for use as durable housing for IDPs from previous conflicts and insure the overall sustainability of housing solutions. In this agreement, USAID intends to assist the GoG to rehabilitate housing and infrastructure under its planned "Internally Displaced Persons (IDP) Durable Housing Project". Under this project, USAID assistance will provide upgrades for nearly 4,000 houses constructed by GoG without running water or sewerage for IDP's from the August 2008 war and rehabilitates about 118 buildings.

1.1 Project Description

Georgia's periods of conflict have resulted in approximately 250,000 IDPs located throughout the country. The most recent conflict in August 2008 exposed Georgia's fragile democratic and economic condition. These issues continue to require long-term support. Failure to provide IDPs with modern and secure housing is likely to contribute to Georgia's political and economic instability. The Georgia Municipal Infrastructure and IDP Housing Rehabilitation Project (GMIP) will implement infrastructure rehabilitation activities in collaboration with the GoG Municipal Development Fund (MDF). This Scoping Statement (SS) covers two subcomponents of the GMIP Component 3 IDP Durable Housing: (1) Provide water and sanitation upgrades for IDP cottage housing for IDPs from the August 2008 war and (2) Provide durable housing solutions for IDPs from the 1990s conflict. The two subcomponents of the IDP Durable Housing Component are briefly described below and in more detail under Alternative 2.

Subcomponent 1: Provide Water and Sanitation Upgrades for IDP Cottage Housing for IDPs from the August 2008 War.

GMIP will provide upgrades for nearly 4,000 houses constructed by the GoG following the August 2008 war. Due to the emergency situation following the war, these houses were often poorly constructed and the GoG is improving facilities with new showers, sinks, toilets, water taps and other renovations in cottage residences that currently lack these facilities.

GMIP will provide technical and financial assistance to design and install portable water systems and improve sewage collection and treatment in these settlements. Specific actions to be undertaken as a part of this activity include: water supply improvements, installation of indoor plumbing and installation of on-site sewage treatment.

Subcomponent 2: Provide Durable Housing Solutions for IDPs from the 1990s Conflict

Many IDPs from the 1990s conflict remain in collective centers with poor physical living conditions. As part of providing new housing for a portion of this population, GoG intends to rehabilitate collective centers and other buildings for IDP's. The rehabilitation of these buildings is consistent with the Ministry of Refugee Affairs (MRA) interest in improving the overall living conditions of IDP's. MRA has identified 118 potential buildings for USAID rehabilitation. The

buildings are both privately and State owned. Privately owned buildings that have been identified for rehabilitation will be purchased by the GoG.

1.1.1 Project Purpose

The major purpose of the GMIP project is to improve living standards for nearly 4,000 houses constructed by the GoG without running water or sewerage for IDPs from the August 2008 conflict and to provide each house with a shower, sink, toilet, water taps and other renovation as necessary and upgrade existing IDP shelters and redevelop buildings for use as durable housing for IDPs from previous conflicts. GMIP may also support other activities focused on ensuring overall sustainability of IDP housing. In other project components, GMIP will also improve the infrastructure in five selected municipalities - Dusheti, Mtsketa, Gori, Kareli, and Oni, affected during the Russian conflict in 2008 and improve irrigation infrastructure in the Shida Kartli region of Georgia. Municipal infrastructure and irrigation activities will be evaluated separately from this scoping process and PEA.

1.1.2 Project Need

The dual shocks of Georgia's August 2008 conflict with Russia and the global economic downturn pose serious challenges to Georgia's economic stability. This in turn puts pressures on Georgia's political stability. The conflict, crisis, and subsequent slowdown in economic growth and foreign direct investment have placed a severe strain on Georgia's national budget and its ability to finance core investments in critical regional development initiatives. Many years of decline in the quality, coverage and maintenance of basic services, including water supply, sewage, local roads, solid waste services, and irrigation systems have dramatically reduced Georgia's quality of life in rural areas and constrained private sector growth. Such degradation and instances of conflict-related damage have resulted in significant constraints to the productive capacity and quality of life of thousands of Georgians, including old and new IDPs, rural poor, and persons directly or indirectly affected by the 2008 conflict with Russia. GMIP will address these Georgian needs.

1.1.3 Technical Overview

USAID has selected a GoG contracting arrangement with the Municpal Development Fund (MDF) as the financing vehicle for GMIP. Such an arrangement places the MDF in a key implementation role as this organization will be responsible for program management, procurement of goods and services, oversight and implementation. To support this arrangement, the MDF has been certified by USAID as having adequate financial, technical and procurement management capacity to perform its responsibilities under this program.

USAID contracted with Tetra Tech to support USAID in the oversight and monitoring of MDF activities. Tetra Tech will help select projects, monitor processes and practices, identify and mitigate areas of risk, and carry out oversight and quality control efforts to ensure that selected projects are implemented effectively and in accordance with both US and Georgian standards and regulations. Tetra Tech will also focus on the environmental aspects of the program, including (1) providing oversite for the development of environmental scoping statements for

components 1 and 2, (2) provide the Programatic Environmental Assessment for component 3, and (3) provide environmental impact assessments for components 1 and 2 if required.

Two implementing Letters (ILs) have been signed between the MDF and USAID. Contract No. USAID/NS/01-2011 with Geo Ltd. addresses GMIP Component 3. The Geo contract was designed to meet two major objectives, Objective A and Objective B as described below.

Objective A. This objective is to obtain technical and logistical services to support USAID's efforts to carry out environmental scoping and develop a scoping statement. This should identify significant environmental issues relating to the proposed rehabilitation of municipal and irrigation infrastructure, determine the range of alternatives and identify those issues to be analyzed in depth in the follow-on programmatic environmental assessment. The scoping process will help to set aside further examination of issues that are not significant and/or that have been addressed by prior studies. The environmental scoping will focus on alternatives and probable significant environmental impacts to be considered, with a detailed description of associated elements of the built and natural environment.

Objective B. This objective is to carry out a technical assessment and prepare feasibility studies (e.g., construction sustainability, cost, benefit) for future design of the rehabilitation projects, which will then be used for the tendering. The feasibility studies will examine both the technical and economic aspects of proposed projects and will provide sufficient technical information to allow the MDF and USAID to select those proposed projects with the highest benefit per investment cost and that are the most feasible to implement.

Geo activities investigated an approximately 25% sample of all proposed IDP housing. MRA identified 118 potential buildings for USAID rehabilitation. As part of the selection process, the MDF assessed the potential of approximately thirty-five buildings for rehabilitation for objective A and all 118 buildings for objective B. The Geo contract was completed in July 2011 and contributed to completion of this Scoping Statement.

1.2 22 CFR 216 Background

USAID's environmental regulations (22 Code of Federal Regulations 216 or Reg. 216) establish the conditions and procedures for environmental review. These procedures apply to new projects, programs or activities authorized by USAID. The Initial Environmental Examination (IEE) for GMIP was drafted and approved by the Europe and Eurasia Bureau Environmental Officer (BEO) on June 22, 2010 (DCN: 2010-GEO-021). Pursuant to Reg. 216 and the IEE's Positive Determination, a Programmatic Environmental Assessment (PEA) is required. Pursuant to Section 216.6(d) of Reg. 216, a PEA may be appropriate "in order to assess the environmental effects of a number of individual actions and their cumulative environmental impact in a given country or geographic area, or the environmental impacts that are generic or common to a class of agency actions or other activities that are not country specific". The PEA ensures that environmental consequences and their significance are known and clearly identified prior to the approval of the final design and start of construction [216.3 (a) (4)].

1.2.1 Summary of 22 CFR 216 Requirements

USAID environmental policy and environmental assessment procedures are provided in 22 CFR 216. The purpose of Reg. 216 is (i) to establish a process for the review of environmental and social impacts; (ii) to ensure that projects that are undertaken as part of programs, funded under USAID with eligible countries, are environmentally sound; (iii) are designed to operate in compliance with applicable regulatory requirements, and, (iv) as required by the legislation are not likely to cause a significant environmental, health or safety hazard. Under the Positive Determination in the IEE for GMIP, a PEA is required and this Scoping Statement (SS) is being prepared to determine the extent of and the approach to the PEA [216.3 (a)(4)]. The scoping process should result in a written statement that includes the following:

(a) A determination of the scope and significance of issues to be analyzed in the PEA, including direct and indirect effects of the project on the environment.

(b) Identification and elimination from detailed study of the issues that are not significant or have been covered by earlier environmental review, or approved design considerations, narrowing the discussion of these issues to a brief presentation of why they will not have a significant effect on the environment.

(c) A description of: (1) timing of the preparation of environmental analyses, including phasing (if/where appropriate); (2) variations required in the format of the PEA; and (3) the tentative planning and decision-making schedule; and

(d) A description of how the analysis will be conducted and the disciplines that will participate in the analysis (content of further study);

The Georgian environmental legislation does not consider preparation of the Scoping Statement as a part of the environmental assessment process, and thus, does not contain any specific requirements for the preparation of a Scoping Statement.

1.2.2 Environmental Threshold Finding

The IEE for GMIP was approved by the BEO on June 22, 2010. GMIP activities involving establishment of homeowners associations and housing maintenance were determined to be "Categorical Exclusions" [216.2]. Infrastructure upgrades for new IDP houses and infrastructure upgrades as part of the rehabilitation of buildings for IDPs were designated with a Positive Determination because of their potential for significant adverse environmental effects. The IEE's Positive Determination requires preparation of a PEA to ensure environmental consequences and their significance are known and clearly identified prior to the approval of the final design and start of construction [216.6].

1.3 Purpose of Scoping Statement

This SS is being prepared in accordance with 22 CFR 216.3(a)(4) and the IEE. Reg. 216 stipulates scoping as a preliminary task within the environmental assessment (PEA) process. The SS provides a mechanism for consulting on and agreeing on the content and methodology of the

subsequent PEA. The purpose and objectives of the GMIP scoping process are to identify the topics and significant issues for the PEA, eliminate issues that are not significant and define the approach to and methodologies to be applied to the PEA process.

This SS describes the proposed project and alternative actions along with a brief description of the affected environment and issues to be analyzed in the scoping process. It then outlines the requirements of the PEA team and PEA schedule.

1.4 Public Scoping Process and Findings

The Scoping Team consisted of LTD GEO and Tetra Tech. GEO activities were led by Mariam Bakhtadze, Georgian environmental specialist experienced with scoping reports, and the Tetra Tech team was led by James Gallup, senior environmental specialist. To carry out the scoping process, environmental issues were identified, reviewed, and prioritized. This was accomplished through the following three tasks:

- Identifying and reviewing existing environmental information and studies related to the GMIP Component 3;
- Carrying out site visit investigations to ascertain additional environmental issues; and,
- Obtaining stakeholder input and feedback in organized meetings to ensure that significant environmental issues are identified.

Public stakeholder scoping meetings were conducted at the Telini IDP settlement in Kaspi municipality on June 23, 2011 and at Kutaisi City on June 29, 2011. The purpose of the meetings was to provide information and get the opinions of the locals related to the project. A total of 65 people attended both meetings including representatives of Teliani IDP, Kutaisi IDP, local governments, Ministry of Refugees, Ministry of IDPs and World Vision. Part of the Kutaisi IDP stakeholder meeting was aired by the local Imereti TV broadcasting channel RIONI.

The aims of the scoping meetings were (i) to inform the local community about the goal of the project and to ensure their involvement at the early planning stage, (ii) to identify community concerns regarding potential social and environmental issues related to the development of the project and gain their feedback, and (iii) to ensure a positive attitude towards the project and increase cooperation perspectives between IDP's and project developers. Additional information about the public meetings is attached in Appendix D.

2. SCOPE AND SIGNIFICANCE OF ISSUES TO BE ANALYZED IN PEA

This section of the SS provides a description of Georgia's EIA legislation, the "Affected Environment" in the project area, alternatives that will be evaluated in the PEA, direct and indirect effects on the environment and significant environmental effects that will be analyzed in the PEA.

2.1 Overview of National Environmental Legislation

Environmental Impact Permits are issued by the Ministry of Environment under a procedure involving (1) environmental impact assessment (EIA), (2) ecological examination and (3) public participation. The detailed procedures are mainly determined by the Law on Ecological Examination (December 14, 2007), the Law on Licenses and Permits (June 25, 2004) and the Law on Environmental Impact Permit (Decree No 154, September 2005, amended February 3, 2006).

The Law on Environmental Impact Permit contains the list of activities subject to EIA and the related procedures and regulates the issuance of environmental impact permits. According to the law, a developer seeking a permit prepares the EIA, organizes public discussions, considers comments received from the public, takes measures as appropriate and applies for the permit. The Ministry carries out the ecological examination of the project and issues a permit within 20 days. The ecological examination provides the requirements of the Environmental Impact Permit and the Construction Permit. In this context, in line with conclusions of the ecological examination, the approvals received from other Ministries/Departments relevant to the project are also requirements for issuing the environmental permit.

Apart from the legislation directly related to the preparation of EAs and issuance of environmental permits, there are other environmental laws, regulations and standards that should be followed during preparation of the EIA. These laws and regulations are Law on Protected Areas, Law on Wildlife, Law on Minerals, Law on Environmental Protection Services, Law on Protection of Ambient Air, Law on Water and others.

The overview of national legislation will be reviewed in more detail in the PEA.

2.2 Affected Environment

The scoping team conducted field visits (May and June 2011) and desk studies to gather baseline information. Available information was collected from published sources including books, periodic publications, scientific journals, etc. Information was screened during site visits using the Environmental Site-Screening Analysis. Two examples of completed analyses are attached in Appendix C. This section provides information on ecological settings, archeology and cultural heritage, access roads, air quality and noise/vibration and socio-economic issues.

The following is a brief description of the affected environment; the PEA Team will provide more detail in the PEA (see PEA outline in Section 5).

Surface and Groundwater Resources

Georgia has about 25,000 rivers, many of which power small hydroelectric stations. According to http://dictionary.sensagent.com/geography%20of%20georgia%20%28country%29/en-en/#Location, water drainage is into the Black Sea to the west and through Azerbaijan to the Caspian Sea to the east. The largest river is the Mtkvari (formerly known by its Azerbaijani name, *Kura*, which is still used in Azerbaijan), which flows 1,364 km from northeast Turkey across the plains of eastern Georgia, through the capital, Tbilisi, and into the Caspian Sea. The

Rioni River, the largest river in western Georgia, rises in the Greater Caucasus and empties into the Black Sea at the port of Poti.

Georgia's renewable groundwater resources are estimated at 17.23 km^3/year, of which 16 km^3/year are drained by the surface water network. This is the equivalent of a total of 58.13 km^3/year as internal renewable water resources (IRWR). The total actual renewable water resources (ARWR) are 63.33 km^3/year.

Some wetlands in the country are of significant environmental importance such as:

- central Kolkheti (33 710 ha), on both sides of the mouth of the Rioni River along the central part of the eastern Black Sea coast, in the regions Guria and Samegrelo near the city of Poti. The site contains many relicts and endemic species of flora and fauna. Kolkheti State Reserve (500 ha) was established in 1947.

- Ispani (513 ha) in the autonomous Republic of Adjara, one kilometre from the Black Sea coast near the city of Kobuleti. The area supports rare mammal species and migratory waterbirds of international importance.

No project sites are in the vicinity of these two wetland systems. Additional information on ground and surface water resources, including wetlands, will be provided in the PEA, in particular as they are related to the cottage settlements, where water and sewage treatment will be provided.

Ecological and Geological Settings and Land Use

The IDP building rehabilitation project activities are taking place within already disturbed residential areas (mostly in cities and rural settlements) and there are no areas prone to severe geological hazards. The IDP building rehabilitation project development does not require acquisition of additional land. The IDP Cottage Settlement project area is located in rural areas and comprises mostly agricultural land. Constructing the on-site sewage system could affect agricultural land use. Most likely land ownership and servitude rights will be cleared upon finalization of the layout of the sewage project. There is no infrastructure, commercial and/or industrial interests within the project sites. Based on site visits and scoping meetings, there are no restricted zones (e.g. protected areas and/or extremely sensitive environmental receptors) in close proximity to the proposed site.

Archeology and Cultural Heritage

Based on literature review and screening meetings with relevant authorities, there are no potential archaeological and/or cultural sites in the vicinity of planned intervention areas. Existing buildings selected for rehabilitation do not belong to the any kind of cultural and/or historical property.

Access Roads

Most of the sites are located within cities and/or rural areas remote from highways. An exception is Shavshvebi IDP settlement located about 1km from the main highway connecting the settlement to the City of Tbilisi. Access roads are in acceptable condition and project sites are easily accessible.

Air Quality and Noise/Vibration

The monitoring of the air and noise pollution is carried out only in the following project cities: Tbilisi, Rustavi and Kutaisi. There is no data on air quality in other parts of the regions/cities. The only available data are those of stationary sources provided by the industry sector to the Ministry of Environment Protection of Georgia. The closest noise pollution sources to the proposed projects are transportation. No blasting activities are planned on projected sites and the scoping team expects that noise/vibration generated from construction activities will not exceed acceptable levels. Participants in the scoping meetings made no mention of concern with noise or air quality.

Socio-Economic

Employment is the most important issue for all IDPs. Few have salaried jobs and others are involved in selling agricultural products and/or providing labor services. Most are unemployed. During the whole construction period, IDPs living in buildings selected for rehabilitation will be relocated.

2.3 Alternatives Including the Proposed Actions

This section describes the alternative actions that meet the project's purpose and need to provide IDPs with durable housing solutions. Three alternatives were evaluated: "No Action" (Alternative 1);"Proposed Action" (Alternative 2); and "Cash or Voucher Transfer" (Alternative 3). The Scoping Team identified Alternative 3 as a feasible alternative which meets the project purpose. No other alternatives were identified that are feasible and meet the project purpose.

The alternatives are described below.

2.3.1 Alternative 1 -- No Action

The No Action Alternative means that USAID will not support the project and therefore, it would be unlikely that the GoG will provide technical assistance for ensuring durable housing for IDPs. This alternative provides a benchmark against which the action alternatives may be evaluated.

Under this No Action Alternative, IDPs occupying collective centers with poor and/or unsafe living conditions and IDPs in rural settlements with limited water and sanitation facilities would not receive any funding needed for improving their living conditions. IDP's without durable housing may continue to live within the area contaminated by hazardous materials or wastes (e.g. asbestos). However, the IDPs may undertake improvements on their own, or they may enlist contractors that are not reputable to rehabilitate the structures. Either of these possibilities would

likely result in poor construction practices since there will be little or no oversight and construction will be haphazard, not held to the high standards that are required under the current program. This is especially a concern for asbestos removal and for safety of inhabitants. Some of the IDPs may move away, but this is unlikely, and if it occurs, only a small percent are likely to have the resources to move. The unsanitary conditions will continue to impact the environment with sewage and if poor construction practices are used, asbestos removal could result in significant impacts to human health. For IDPs occupying structurally unsafe and/or unsanitary facilities, risk of public safety associated with building collapse and/or transmission of disease vectors would gradually increase.

2.3.2 Alternative 2 -- Proposed Action

The purpose of this alternative is to improve living conditions of IDPs. This task is achieved through following interventions:

a) Provide Water and Sanitation Upgrades for IDP Cottage Housing for IDPs

Under this component, GMIP will provide upgrades for nearly 4,000 cottage houses constructed by the GoG following the August 2008 war. The Municipal Development Fund (MDF) prioritizes 11 IDP settlement located in Shida Kartli Region for receiving USAID funding support. These settlements lack sewage systems, indoor toilets and shower systems and other housing facilities (e.g. storage facilities).

GMIP will provide assistance to perform necessary technical and financial feasibility studies. As part of the technical analyses (engineering design and feasibility study prior to project implementation), the program will evaluate the appropriateness of the proposed siting of facilities (e.g. on-site sewage system). As a result, the program will avoid implementing projects with critical engineering or environmental flaws that might affect the performance of the project, integrity of the infrastructure, and/or impact on agricultural land. GMIP will improve living conditions in IDP settlements by providing on-site sewage treatment, shower systems and storage facilities.

In all IDP cottage housing, GMIP will install on-site sewage treatment systems, The type of treatment system will depend on site-specific conditions. Various alternative treatment systems will be explored in the PEA. The private toilets and shower facilities will be arranged outside of each cottage building. Residents of the settlements agree on construction of shower and toilet facilities on the border between two adjacent cottages. Each toilet will be equipped with flushing, sewage will be collected and treated in an on-site wastewater treatment system. About 1500 meters long piping network will be constructed to the settlements in order to drain wastewater to the treatment system. The entire system will be operated by gravity without requiring pumping systems. Separate small storage facilities (about 12 m^2 (3X4) will also be constructed in each cottage yard. Proposed interventions were discussed with IDPs during the stakeholder meetings.

The potable water connection will be to existing wells; no new boreholes will be drilled, and none of the connections will be to municipal systems. Water quality testing will be included as part of this activity, and will be described in more detail in the PEA.

b) Provide Durable Housing Solutions for IDP's from the 1990s Conflict

GMIP will rehabilitate collective centers and other buildings for IDPs. The rehabilitation of these buildings is consistent with Ministry of Refugee Affairs (MRA) interest in improving overall living conditions of IDPs. The MRA has identified 118 potential buildings for GMIP rehabilitation. As part of this selection process MDF assessed and proposed 98 buildings for inclusion in the rehabilitation program. The buildings are located throughout the country.

The IDP Durable Housing Program will prepare a technical feasibility study for the rehabilitation of IDP's buildings. The feasibility study document includes: a) assessing structural stability of the project; b) assessing conditions of internal and external gas, electricity, sewage, and water systems; c) examining building conditions in terms of groundwater impact to detect dampness on walls and floors. The feasibility study provides technical and economical assessment of proposed buildings and recommends the feasibility of building rehabilitation works. Based on feasibility study findings, GMIP identified an adequate number of buildings for rehabilitation purposes (buildings with weak structural integrity were excluded from funding support).

Availability of durable housing has been a serious problem for IDPs occupying the buildings. In many cases IDP's currently occupy buildings not typically designed for living purposes (e.g., used for kindergartens and schools). This proposed alternative envisions conversion of these buildings to durable housing space. The adequate housing for IDPs is ensured per Standards for Rehabilitation, Conversion or Construction Works for Durable Housing for IDPs developed by the MRA. The overall guiding principle is to enable IDPs to remain in their current location by providing them with durable housing which conforms to these Standards.

All buildings selected for rehabilitation are located in urban areas. Building rehabilitation activities involve bear stripping of the facility and replacement of the old building roof, inside walls, insulation, and façade plaster, and floors. Old electrical systems will be replaced with new systems and gas piping will be installed in all buildings.

The project will require rehabilitation of existing sewage and water pipelines. The water and sewage pipelines will be connected to the central system. No new treatment will be needed. Energy efficient technologies (e.g. EE light bulbs, high-efficiency heating and cooling equipment) will be installed during rehabilitation of the building.

The housing design will ensure its accessibility by disable people. The living space (not including the bathroom) for one room flat would range from 25-35m^2; two room flat - 40-45m^2 accordingly. Each flat would be furnished with the kitchen and bathroom along with adequate heating, electricity, water and sewage collection systems.

Housing at the proposed project sites would be offered to IDP families and individuals regardless of their ethnic identity or economic background including whether they were displaced during the August 2008 war and/or impacted by 1990 conflict.

2.3.3 Alternative 3 – Cash or Voucher Transfer Program

This alternative would provide cash or voucher transfers to IDPs, which would provide them with a choice in the selection of a housing solution. This program would involve a pre-set amount for direct payment or voucher, and the IDPs would be required to submit invoices to show the cash or vouchers were used for the purposes intended. As in the No Action Alternative, IDPs would choose their own contractors, oversight of their work would be minimal, and they would not be held to the strict standards that GMIP is held to. This alternative would fulfill the project purpose, and IDPs may feel more "ownership" of the housing units since they will have greater responsibility for rehabilitation decisions. This may be a benefit in the long-term since they would also be expected to take greater responsibility for maintenance.

2.4 Direct Effects of the Project on the Environment

An important factor in determining the scale and significance of the environmental and social impacts generated by alternative interventions is that all construction/rehabilitation activities are taking place within already disturbed residential areas (mostly in cities and/or rural settlements). The analysis of direct impacts is provided in Appendix A for IDP Cottage Settlements and Appendix B for IDP Building Rehabilitation Projects. The environmental impacts are analyzed separately for the construction/rehabilitation phase and for the operational/maintenance phase. Impacts are assessed for the following environmental and social receptors:

- Soils, Geology, and Landscape
- Water Resources (including surface and underground water resources as well as drinking water resources)
- Air Quality
- Biodiversity (flora and fauna)
- Community, Socio-Economic, and Public Health (including cultural and historical assets, population, public health, temporary resettlement etc)

There are significant beneficial environmental impacts associated with the GMIP proposed alternative. Examples include elimination of sewage discharges into groundwater and improving IDP's living conditions that improve public health conditions for IDPs.

2.5 Indirect Effects

Indirect effects that will be evaluated include the potential for additional people to move into the area, taxing water, sanitation, schools, and other infrastructure/resources. Also, these projects could have spin-off effects and result in additional development in the area that may have environmental impacts. The positive and negative aspects of these indirect effects will be evaluated, as well as other indirect effects that the PEA team identifies.

Cumulative impacts represent environmental impacts of a proposed action in combination with the impacts of other past, existing and proposed actions. Cumulative impacts occur when all

impacts are taking place together in terms of location and time. During construction and/or operational phases there might be times when different impacts will be experienced over the same periods of time. For example, these cumulative impacts may occur during construction periods when traffic, noise and air quality impacts will be disruptive to those living and working nearby the proposed projects. Cumulative impacts will be evaluated in the PEA, and mitigations will be developed, as necessary.

2.6 Significant Effects to be Analyzed in the PEA

Potential significant effects were identified by using the environmental review forms in Appendices A, B and C. The Scoping Team analyzed potential significant effects for environmental, health and social impacts related to water and sanitation upgrades in cottage settlements and for building rehabilitation projects. The team analyzed potential significant effects for cottages and buildings during construction/rehabilitation periods and operational/maintenance periods.

IDP Cottage Settlement Projects

Construction/Rehabilitation: Construction and/or rehabilitation activities could have several temporary impacts. Inappropriate sitting of the project (e.g. arranging the on-site sewage system) could generate significant environmental and safety hazards. Alternative locations should be considered during on-site sewage system planning.

The construction/rehabilitation phase involves site cleaning, excavation, erection and/or installation of equipment and machinery, transportation and material handling. These activities could generate waste, dust and increase air emission which could negatively impact on soil and water sources and air quality. Construction site clearing could result in accumulation of topsoil which needs proper handling and reuse during demobilization and site cleanup.

The project will require rehabilitation of existing water pipelines. These will be connected to existing systems which are onsite wells. GMIP will not support upgrading of existing water supplies or drilling of water wells. Installation of the on-site sewage treatment system will require construction and pipeline trenches. Potential impacts could include the contamination of soil and water from sewage, removal of vegetation cover which could result in soil loss, and creation of breeding grounds for animal and insect disease vectors.

Operation and maintenance: It is expected that the operation and maintenance of the sewage facilities will beneficially impact on IDP living and health standards. However, impacts on water and soil quality are possible. The treatment plants will require operation and maintenance support.

IDP Building Rehabilitation Projects

Construction/Rehabilitation: Construction and/or rehabilitation activities include building stripping, trench excavation, backfilling and site restoration. Asbestos and other hazardous construction materials may require special attention in the PEA to insure that environmental impacts are avoided and/or minimized.

Construction vehicles would include trucks hauling construction debris and delivering construction materials and supplies. Construction vehicles may interfere with local traffic and

could cause potential pollution of the surrounding environment (e.g. emissions, potential pollution by fuel/oils etc). These vehicles and construction equipment could increase air emission levels and the PEA should consider minimizing potential impacts.

The project may require rehabilitation of existing sewage and water pipelines. The water and sewage pipelines will be connected to the central system. Potential impacts arising from above activities could include the contamination of soil and water from sewage and creation of breeding grounds for animal and insect disease vectors.

During building rehabilitation, IDPs living in buildings selected for reconstructive/rehabilitation activities may be relocated. Distance between relocation and their places of employment might cause adverse impacts on IDPs.

Operation and maintenance: After construction is completed, facilities and construction camps will be demobilized and support infrastructure removed potentially impacting soil, water and/or vegetation. The impacts can be caused by generated hazardous and non-hazardous materials, construction debris, demobilization of warehouses, sanitary facilities etc.

Significant Effects for PEA

Significant effects to be analyzed in the PEA are based on the scoping team's assessment of construction/rehabilitation and operation/maintenance effects as well as the direct effects as documented in Appendix A and Appendix B. High environmental risk is based on scale, severity, probability and duration of impacts.

Table 1: Potential Significant Impacts for IDP Cottage Settlement Projects

Activities or Endpoints	Impacts
Geology, Soils and Land Use	• Contamination of soil by accidental spills (fuels, oil and other); • Contamination of soil by disposal of debris and generated wastes;
Water Resources	• Groundwater infiltration / contamination due to disposal and/or accidental spill of oil and lubricants and other waste materials; • Lack of on-site sanitary facilities for construction workers causing pollution to surface and groundwater;
Socioeconomic Issues	• Introduction of short-term labor force into the community; • Disturbance of IDP's due to construction machinery, traffic and/or possible removal activities; • Employment opportunities in the construction/rehabilitation activities; • Improvement of livelihoods, including improved standards of living for affected people
Public Health Issues	• Potential worker safety impacts due to accidents; • Occupational health and safety concerns due to improper handling and disposal of hazardous wastes at project site (e.g. asbestos); • Health and sanitation problems due to inadequate housing and sanitation structures for laborers ;
Air Quality	• Generation of dust due to construction equipment; • Emissions from combustion of fossil fuels by construction equipment; • Increase of vehicle traffic emissions during construction;
Waste Generation	• Disposal of debris and construction wastes; • Sanitation facilities at construction sites during construction phase; • Hazardous waste impact during rehabilitation activities (e.g. asbestos) • Contamination from demolition, construction site demobilization and site cleanup;

Table 2: Potential Significant Impacts for IDP Building Rehabilitation Projects

Activities or Endpoints	Impacts
Geology, Soils and Land Use	• Contamination of soil by accidental spills (fuels, oil and other); • Contamination of soil by disposal of debris and generated wastes;
Water Resources	• Groundwater infiltration / contamination due to disposal and/or accidental spill of oil and lubricants and other waste materials; • Lack of on-site sanitary facilities for construction workers causing pollution to surface and groundwater;
Socioeconomic Issues	• Human relocation issue may occur in case of rehabilitation of collective centers inhabited by IDP during rehabilitation period; • Introduction of short-term labor force into the community; • Disturbance of IDP's due to construction machinery, traffic and/or possible removal activities; • Employment opportunities in the construction/rehabilitation activities; • Improvement of livelihoods, including improved standards of living for affected people
Public Health Issues	• Potential worker safety impacts due to accidents; • Occupational Health and Safety concerns due to improper handling and disposal of hazardous wastes at project site (e.g. asbestos); • Health and sanitation problems due to inadequate housing and sanitation structures for laborers ; • Improper handling of construction materials;
Air Quality	• Generation of dust due to construction equipment; • Emissions from combustion of fossil fuels by construction equipment; • Increase of vehicle traffic emissions during construction;
Waste Generation	• Disposal of debris and construction wastes; • Sanitation facilities at construction sites during construction phase; • Hazardous waste impact during rehabilitation activities (e.g. asbestos) • Contamination from demolition, construction site demobilization and site cleanup;

3. IDENTIFICATION AND ELIMINATION OF ISSUES THAT ARE NOT SIGNIFICANT

The identification of issues that are not significant is based on the analysis of direct effects provided in Appendix A for IDP Cottage Settlements and Appendix B for IDP Building Rehabilitation Projects. The analysis of environmental effects included consideration of both the construction/rehabilitation phase and the operational/maintenance phase. Effects were considered separately for cottages and buildings. The list of potential environmental impacts excluded from the PEA is provided in Table 3 for IDP Cottage Settlements and Table 4 for IDP Building Rehabilitation projects.

These tables include the issues that were identified as not significant as well as the reason they were excluded from further analysis in the PEA. The analysis of direct impacts in Appendices A and B contributed to these tables.

Table 3: Environmental Issues Excluded from Further Analysis for IDP Cottage Settlements

IDP Cottage Settlements	
Issues	**Reasons for Exclusion**
Disturbance or threat to important ecological habitats, including protected ecosystems (e.g. national parks) and/or other sensitive areas (e.g. wetland)	The Scoping Team confirmed through site visits, meetings with authorities and document reviews that no protected ecosystems and/or other sensitive areas are in the vicinity of project sites.
Impact on biodiversity (flora, fauna, endangered and threatened species)	The Scoping Team confirmed through site visits, meetings and document reviews that no significant habitats are in the vicinity of project sites. Endangered and threatened species are highly unlikely because all project sites are in previously disturbed and built up sites.
Threat to historic, cultural and aesthetic sites and features	Based on literature review, site visits and screening meetings with relevant authorities, there are no potential archaeological/cultural sites in the vicinity of IDP settlement areas.
Visual disturbance/aesthetic impact	The construction works will be only temporary, and visual disturbance will be minor and short-term. The project would have a beneficial impact on the aesthetics during operational and maintenance phases since housing will be in improved shape and sanitation problems will be improved.
Air quality	Air quality during the construction phase is identified as a potential significant impact to be evaluated in the PEA. No

	dust and emission generation is expected from operational and maintenance phase. A properly designed and normally operating sewage treatment system is odor free.

Table 4: Environmental Issues Excluded from Further Analysis for IDP Building Rehabilitation

IDP Building Rehabilitation	
Issues	**Reasons for Exclusion**
Disturbance or threat to important ecological habitats, including protected ecosystems (e.g. national parks) and/or other sensitive areas (e.g. wetland)	The Scoping Team confirmed through site visits, meetings with authorities and document reviews that no protected ecosystems and/or other sensitive areas are in the vicinity of building sites.
Impact on biodiversity (flora, fauna, endangered and threatened species)	The Scoping Team confirmed through site visits, meetings and document reviews that no significant habitats are in the vicinity of building sites. Endangered and threatened species are highly unlikely because all bulding sites are in previously disturbed and built up locations.
Threat to historic, cultural and aesthetic sites and features	Based on literature review, site visits and screening meetings with relevant authorities, there are no potential archaeological/cultural sites in the vicinity of IDP building rehabilitation sites.
Visual disturbance/aesthetic impact	The construction works will be only temporary, and visual disturbance will be minor and short-term. The project would have a beneficial impact on the aesthetics during operational and maintenance phases since housing will be in improved condition.
Air quality	Air quality during the construction phase is identified as a potential significant impact to be evaluated in the PEA. No dust and emission generation is expected from operational and maintenance phase.

4. METHODOLOGY AND SCHEDULE FOR PREPARATION OF THE ENVIRONMENTAL ANALYSIS

This section covers the methodology that will be used for conducting the PEA environmental analysis. It will also cover impacts identification

4.1 Methodology for Conducting the Environmental Analysis

The scoping process has confirmed the utility of the PEA methodology, noting that the similarities in the activities foreseen under the program with USAID/Georgia funds are sufficient to warrant their assessment as a class of actions. The scoping process has also laid the foundation for the implementation of the PEA for rehabilitation of IDP infrastructure activities in Georgia by achieving the following:

- Preparing reports on existing technical and environmental information.
- Conducting site investigations and stakeholders meetings
- Determining the significant issues to be assessed during the PEA.
- Identifying the PEA team disciplines needed for key PEA issues.

The analysis completed in this SS provides the framework that will guide the work of the PEA team pursuant to the process described in USAID's environmental procedures.

4.1.1 Impacts Identification/Screening and Significance Determination

The PEA will address the two types of projects anticipated under the IDP Durable Housing Program: a) IDP Cottage Settlements and b) IDP Building rehabilitation projects. The scoping process sets the platform for development of the PEA. Site visits will be made to settlements and buildings. Issues identified during the scoping process will be addressed in the PEA in greater depth. Based on scoping process findings and further studies, PEA technical specialists identify significance criteria for all receptors (e.g. geology and soils, socio-economic etc). Attention will be given to direct, indirect and cumulative impacts within the projects influence area. Mitigation measures for each significant impact will be identified. All aspects of the project's life (design, construction, rehabilitation, operation and maintenance) will be considered in the PEA.

The PEA will serve as the environmental manual for all projects under the IDP Housing Program. The PEA will discuss impact characteristics and Environmental Mitigation and Monitoring Plans (EMMP) for all types of projects (building rehabilitation and IDP cottage settlements). Mitigation measures recommended by the PEA will be reflected in the EMMPs covering the following issues: waste management, emissions and noise management, hazardous waste management (includes asbestos, hazardous materials, etc), pollution prevention and management, traffic management and community engagement and other issues. In general, the PEA Team will: 1) study environmental issues of concern for all types of projects; 2) based on the SS, evaluate the significant issues associated with rehabilitation/construction and/or

operation/maintenance that generate potential significant environmental impacts; and 3) develop appropriate EMMPs for each type of project.

The SS has determined which potential environmental impacts will be subject to further analysis, while insignificant impacts will not be considered further. The PEA team has been chosen based on the potential impacts identified in this SS. The experts will evaluate potential significant impacts associated with each alternative and the team will develop appropriate mitigation measures. Each expert will focus on the impacts in their specialization areas and expertise. Based on a discussion of environmental consequences, the team will determine the need for mitigation measures and whether mitigation is practicable. Where mitigation is not possible or if it is inadequate to minimize concerns, the team will note this as an irreversible and unavoidable consequence.

4.1.2 Data Sources

At the initial stage, the information on specific needs is collected from published sources including periodic publications, scientific journals and internet websites and data sources. Due to the different projects already existing in this area, there is sufficient data already in place within the country. Fieldwork will involve visits to IDP cottage settlements and IDP building rehabilitation projects. Appropriate government authorities, NGOs, and bilateral and multilateral donors will be consulted.

4.3 Schedules

In order to carry out the PEA, the scoping team envisions the following additional arrangements, methods, timing and phasing based on the approval of the SS and an Interim Period to begin the PEA.

4.3.1 Preparation of the PEA

This SS will be reviewed and approved by the USAID/Georgia Mission Environmental Officer (MEO) and the Europe and Eurasia Bureau Environmental Officer (BEO). PEA implementation covers an Interim Period and time for PEA preparation.

Interim Period: While this SS is being reviewed and approved, the PEA implementation team will begin the PEA. This will be done to allow work to begin but be accomplished in a manner that is flexible to incorporate comments that may be received during the SS review process. Initial work will include development of scopes of work for PEA team members including technical activities; levels of effort and the schedule of PEA activities and filing gaps identified in the scoping process. The PEA team will begin analysis of significant environmental and socioeconomic issues, paying attention to both direct and indirect impacts within the project scope. It is important that all phases of the project life be considered, from design and construction to operation and maintenance.

PEA Preparation: The proposed period for preparing the PEA will be approximately four weeks in August 2011 broken down as described below. Throughout the process, meetings will be held with USAID to discuss results of each step.

- Week 1: Complete data analysis from Interim Period including baseline studies, information from reports and data from site visits and meetings with other projects. Visits to IDP cottage settlements and IDP building rehabilitation sites.
- Week 2: Additional site visits and field work at IDP cottage settlements and IDP building rehabilitation sites. Meetings with communities and IDPs as needed. Collection of additional data as needed.
- Week 3: Begin writing PEA, complete site visits and field work. Additional meetings to fill critical information gaps as needed.
- Week 4: Finalize PEA, meet with USAID to discuss findings and results.

The initial analysis includes evaluation of baseline information including required elements under the PEA's affected environment, assessment of significant environmental impacts and consideration of project alternatives. EMMPs will be developed that describe mitigations of adverse impacts, monitoring requirements, including indicators and frequency of monitoring, reporting and responsible parties. EMMPs will cover activities that have similar impacts where a defined set of mitigations address the potential problems as well as impacts that require specialized mitigation measures tailored to the specific problem (e.g., asbestos). The PEA team will convene small discussion groups in key activity sites and with key staff as a vehicle for the all-important consultative process typically associated with environmental assessment.

5. PROGRAMMATIC ENVIRONMENTAL ASSESSMENT FORMAT

5.1 PEA Outline

This PEA Outline includes seven sections that describe each section of the PEA, including the main features of each chapter and section.

5.1.1 Summary

Summary of findings: The summary shall focus the major conclusions, areas of controversy, if any, and issues to be resolved. Specifically, project alternatives and recommended option, impacts and environmental consequences of housing alternatives, and Environmental Mitigation and Monitoring Plans.

1.1 Program Description
1.2 Project Context
1.3 Summary of 22 CFR 216 Requirements, Summary of IEE, Env Threshold, Scoping
1.4 Major Conclusions
1.5 Areas of Controversy (if any)
1.6 Issues to be Resolved

5.1.2 Purpose

Underlying purpose and need to which the project is responding in proposing the alternatives including the proposed action. Also, brief description of IDP housing project and description of the two subcomponents, what they do, objectives and rationale for what they do.

2.1 Project Description
2.2 Purpose and Needs for the Proposed Action
2.3 Threshold Determination
2.4 Host Country Context
2.5 Environmental Scoping Statement
2.6 Stakeholder Engagement and Host Government Consultations

5.1.3 Alternatives Including the Proposed Action

Present, compare & contrast the environmental impacts of the proposal and its alternatives. Principal technology section, descriptions of the project alternatives considered, pros and cons for each. Rationale for the recommended alternative and its impact on the project.

3.1 Comparison Environmental Impacts of Alternatives
3.2 Evaluation of Alternatives
3.3 Rationale for Eliminating Alternatives not Included in PEA
3.4 Discussion of Alternatives
    3.4.1 Alternative 1 (No Action)

3.4.2 Alternative 2 (Proposed)
3.4.3 Alternative 3 (Feasible Alternatives)
3.5 Ranking of Alternatives with Respect to Significance of Environmental Impacts

5.1.4 Affected Environment

Section that covers the required elements under the PEA's affected environment. Describes the environment around the cottage housing areas and buildings rehabilitated. Site locations and details about the foot-print of the project. Data and analyses in the PEA shall be commensurate with the significance of the impact with less important material analyzed, summarized, consolidated or simply referenced, as appropriate.

4.1 Population Characteristics
4.1.1 Size
4.1.2 Ethnicity
4.1.3 Gender
4.1.4 Age Distribution
4.1.5 Socioeconomic Characteristics
4.1.6 Description of Project Beneficiaries
4.2 Public Health Status
4.3 Socioeconomic Status
4.4 Geographic Characteristics
4.5 Land Use Characteristics
4.6 Cultural or Historic Resources
4.7 Environmental Baseline Information
4.7.1 Biological Diversity
4.7.2 Endangered, Threatened and Protected Species and their Habitats
4.7.3 Protected Areas and National Parks
4.7.4 Environmental Data
4.7.5 Environmental Studies of Affected Areas
4.8 Policy, Legal, Regulatory and Permitting Requirements
4.8.1 Host Country Government Policy, Legal and Regulations
4.8.2 International Standards and Best Practices
4.8.3 Relevant and Applicable Permitting Requirements
4.9 Natural Resources
4.9.1 Climate
4.9.2 Air
4.9.3 Water Resources
4.9.4 Ground Water
4.9.5 Surface Water
4.9.6 Wildlife
4.9.7 Land Resources

5.1.5 Environmental Consequences

Provides analytic basis for decisions found in section 2 (above). Environmental impacts of alternatives and proposed action, and adverse impacts that cannot be avoided. This section of the PEA should include discussions of direct effects and their significance; indirect effects and their significance; possible conflicts between the recommended actions, policies and controls for the areas concerned; energy requirements; and the design of the built environment, including the recommended alternatives and mitigation measures; and means to mitigate adverse environmental impacts for design/construction and operation/maintenance. This section includes the results of meetings with stakeholders.

5.1 Environmental Impacts of Proposed Action and Alternatives
- 5.1.1 Direct Effects and their Significance
- 5.1.2 Indirect Effects and their Significance
- 5.1.3 Cumulative Effects and their Significance
- 5.1.4 Area of Land Disturbance
- 5.1.5 Endangered, Threatened or Protected Species and their Habitats
- 5.1.6 Wetland Impacts
- 5.1.7 Biodiversity Losses
- 5.1.8 Possible Conflicts between Proposed Action and Land Use Plans
- 5.1.9 Possible Conflicts between Proposed Action and Area Policies/Controls
- 5.1.10 Energy Requirements and Conservation Potential of Mitigations
- 5.1.11 Natural or Depletable Resource Requirements
- 5.1.12 Conservation Potential of Mitigations
- 5.1.13 Urban Quality
- 5.1.14 Historic and Cultural Resources
- 5.1.15 Design of the Built Environment including Reuse and Conservation
- 5.1.16 Means to Mitigate Adverse Environmental Impacts

5.2 Comparison of Environmental Effects of the Alternatives
- 5.2.1 Summary
- 5.2.2 Comparison of Remedies Available for Consequences of Alternatives
- 5.2.3 Overall Comparison of Alternatives with respect to Feasibility, Ability to Meet Goals, Environmental Impact Ranking, Costs, Schedule

5.3 Adverse Impacts that Cannot Be Avoided

5.4 Relationship Between Short Term Uses and Long Term Productivity

5.5 Irreversible and Irretrievable Commitment of Resources

5.1.6 Environmental Mitigation and Monitoring Plans

Overall description of interventions associated with the recommended alternative, and recommended measures available.

6.1 Environmental Mitigation Plan

6.2 Environmental Monitoring Plan

5.1.7 List of Preparers

5.1.8 Appendices

6. ENVIRONMENTAL ASSESSMENT TEAM COMPOSITION

Data collection, field studies, analyses and PEA preparation will be conducted by a specialized team of scientists and engineers from Tetra Tech. Backgrounds of principal members of the PEA Team are highlighted below:

James Gallup, Ph.D., P.E., Team Leader and Environmental Specialist. Dr. Gallup is a senior environmental specialist with over 40 years of international experience, including projects in Georgia. He led a team that prepared a Programmatic Environmental Assessment (PEA) for the USAID AgVANTAGE Project implemented by ACDI/VOCA. He has provided direct technical support to the Europe and Eurasia Bureau Environmental Officer and he designed and implemented USAID's Global Environmental Pollution Prevention Project (EP3). Dr. Gallup, a registered professional engineer, earned his Ph.D. in Environmental Engineering from the University of Oklahoma. He holds a MS in Environmental Engineering and a BS in Microbiology.

Karen Menczer, Environmental Specialist. Ms. Menczer is an environmental specialist who has supported international development programs in Eastern Europe, Asia, Africa, Latin America and the Caribbean for more than 25 years. She has worked extensively with USAID, most recently preparing Reg 216 environmental documentation for the Georgia Power and Gas Transmission Project. Ms. Menczer worked towards her Ph.D. at the University of New Mexico and in Galapagos, Ecuador. She holds an MS in Ecology and a BS in Biology.

Mamuka Shaorshadze, Environmental Specialist. Mr. Shaorshadze has 12 years relevant experience, most recently as an environmental supervisor on two Millennium Challenge Georgia (MCG) fund infrastructure programs. He also served as an Environmental Field Officer for the Georgian Oil and Gas Corporation initiatives funded by the MCG. Mr. Shaorshadze earned his Bachelor's Degree in International Economics from Georgian Technical University.

Teimuraz Levanishvili, Housing Rehabilitation Manager. Mr. Levanishvili is a senior civil engineer with more than 40 years of experience in construction management and housing rehabilitation. He served as Director of Construction for the rehabilitation of state and privately-owned facilities in the earthquake-affected region of Sachkhere. He has deep understanding of durable housing solutions that utilize the most appropriate technology and standards. Mr. Levanishvili studied Civil Engineering at Georgian Polytechnic Institute.

Mamuka Gvilava, Environmental Specialist Mr. Gvilava is an environmental specialist with over ten years experience in performing environmental impact assessments and ensuring compliance on facility and infrastructure programs. Mr. Gvilava has degrees from Tbilisi.

David Girgvliani, Ph.D., Environmental Specialist. Dr. Girgvliani is an environmental specialist with over fifteen years experience in environmental consultancy, especially performing environmental impact assessments and ensuring compliance of facility and infrastructure programs. He has wide expertise in designing and supervising ESMS systems inclusive the specific management plans as well as expertise working as a consultant supporting ESMS implementation. He has also implemented a number of projects where he was responsible for compliance monitoring and reporting. He has a Ph.D. in chemistry

7. APPENDICES

Appendix A: Summary of Impacts Identified for IDP Building Rehabilitation

Appendix B: Summary of Impacts Identified for IDP Cottage Settlements

Appendix C: Environmental Site-Specific Screening Analysis

Appendix D: Stakeholder Meeting Report

APPENDIX A Summary of Impacts Identified for the IDP Building Rehabilitation Projects

IMPACT (Description of effect) and occurrence (construction/operation)	Significance Determination Filter[1]				Are Consequences Significant? (Y) or (N)
	1 Subject of USAID or GoG Requirements[1]	2 Subject of Community Concern	3 Pollution Prevention Potential[2]	4 High Environmental Risk[3]	
Receptor: Soils, Geology and Landscape					
Construction/rehabilitation phase:					
Visual disturbance due to construction/rehabilitation activities					N
Contamination of soils due to accidental spill of fuel/oil and/or other technical liquids			X		Y
Contamination of soil due to uncontrolled disposal of construction waste	X				Y
Land clearance activities (e.g. trench excavation) could generate some amount of the topsoil to be stored properly, handled and reused.					N
Operation/Maintenance Phase:					

[1]Place an "X" in the appropriate column 1, 2, 3, or 4. Starting with Column 1, and proceeding to Column 4. A single "X" (the first one determined) is all that is required for a determination of significance.

[2] Subject to USAID requirements or specifically relevant legislation, regulation, and/or permit requirements. This will likely include effects associated with activities if (1) environmental regulations specify controls and conditions, (2) information must be provided to authorities, and/or (3) there may be periodic inspections or enforcement actions taken by authorities.

[3] Based on technical and business conditions, such as cost-effectiveness, has a high-potential for pollution prevention or resource-use reduction

[4] Associated with potential impact to the environment from high environmental loading due to one or more of the following: scale, magnitude, probability, duration (see attached worksheet – definitions used in determining environmental risk).

Contamination of soil with nutrients, suspended solids, and pathogens due to improper installation of sewage pipes					N
Receptor: water resources (surface and ground water)					
Construction/rehabilitation phase:					
Contamination of groundwater due to accidental spill of fuel/oil and/or other technical liquids	X				Y
Lack of on-site sanitary facilities for construction workers causing pollution to surface and groundwater					Y
Dumping of demolition debris or excess soil from land-leveling into watercourses	X				Y
Operation/Maintenance Phase:					
Not proper maintenance of ground water wells	X		X		N
Receptor: Air Quality					
IMPACT (Description of effect) and occurrence (construction/operation)					
Emissions from construction machinery, construction waste disposal etc may increase the level of emission in the air and dust, especially under windy conditions.	X				Y
Removal of groundcover, borrow pits, and construction sites, creating conditions for airborne dust and particulates					N
Operation/Maintenance Phase:					
No significant impact on air quality during operation/maintenance					N/A
Receptor: Biodiversity					

Construction/rehabilitation phase:					
Construction process may cause removal of vegetation cover, changes in land use pattern. Proposed sites have been previously disturbed and utilized for residential use and there are no unique and/or important farmlands and/or flora species.					N
Operation/Maintenance Phase:					
No significant impact on vegetation cover during operation/maintenance					N
Community, Socio-Economic, and Public Health (including cultural and historical assets, population, public health, temporary resettlement etc)					
Population					
Construction/rehabilitation phase:					
Disturbance of IDPs due to construction machinery, traffic and/or possible removal activities			X		Y
Load on the existing roads will increase due to construction machinery; traffic delays could affect local population within the vicinity of project					N
Traffic increase will generate noise, air emissions, and vibration that might impact on community safety, and cause public nuisance;					N
Temporary employment opportunities in the construction activities (beneficial impact)			X		Y
During the whole construction period, IDPs living in buildings selected for reconstructive/rehabilitation activities will be relocated. Distance of relocation places from their places of employment might cause adverse financial impact to IDP's. Besides, IDPs might undergo emotional stresses due to disruption with their normal lives.			X		Y

Operation/Maintenance Phase:					
Improvement of livelihoods, including improved standards of living for affected people (Beneficial)		X			Y
Public Health					
Construction/rehabilitation phase:					
Construction activities might cause health impact to the workers (e.g. construction related accidents). Also see Air Quality, Population Receptors	X				Y
Inadequate disposal of construction wastes	X				Y
inadequate management of temporary sanitation facilities for workers could cause negative impact on public health during construction phase			X		Y
IDP collective building may contain lead and/or asbestos containing material. Improper handling and disposal of hazardous wastes at project site (e.g. asbestos) might cause negative health impact	X				Y
Demolition rubble creating breeding grounds for rats, standing water creating breeding grounds for insect and water-borne diseases					N
Operation/Maintenance Phase:					
Improvement of livelihoods, including improved standards of living for affected people (Beneficial)		X			Y
Upgrading infrastructure would beneficially impact on public health and decrease level of water borne and/or sewage related diseases; (Beneficial)		X			Y

APPENDIX B: Summary of Impacts Identified for the IDP Cottage Settlement Projects

IMPACT (Description of effect) and occurrence (construction/operation)	Significance Determination Filter[4]				Are Consequences Significant? (Y) or (N)
	1 Subject of USAID or GoG Requirements[5]	2 Subject of Community Concern	3 Pollution Prevention Potential[6]	4 High Environmental Risk[7]	
Receptor: Soils, Geology and Landscape					
Construction/rehabilitation phase:					
Visual disturbance due to construction/rehabilitation activities					N
Contamination of soils due to accidental spill of fuel/oil and/or other technical liquids			X		Y
Contamination of soil due to uncontrolled disposal of construction waste	X				Y
Installing sewage collector system for IDPs may require vibratory pile driving operations which may potentially affect adjacent land and/or buildings					N
Construction process may cause removal of vegetation cover, changes in land use pattern and cause erosion. Proposed sites have been previously disturbed and utilized for residential use and there are no unique and/or important farmlands.					N

[4] Place an "X" in the appropriate column 1, 2, 3, or 4. A single "X" (the first one determined) is all that is required for a determination of significance.
[5] Subject to USAID requirements or specifically relevant legislation, regulation, and/or permit requirements. This will likely include effects associated with activities if (1) environmental regulations specify controls and conditions, (2) information must be provided to authorities, and/or (3) there may be periodic inspections or enforcement actions taken by authorities.
[6] Based on technical and business conditions, such as cost-effectiveness, has a high-potential for pollution prevention or resource-use reduction
[7] Associated with potential impact to the environment from high environmental loading due to one or more of the following: scale, magnitude, probability, duration (see attached worksheet - definitions used in determining environmental risk).

Construction activities involves some land clearance activities (e.g. trench excavation for sewage system installation), which can generate some amount of the topsoil to be stored properly, handled and reused.					N
Operation/Maintenance Phase:					
Contamination of soil with nutrients, suspended solids, and pathogens due to improper installation of sewage pipes and sewage treatment system					N
Receptor: water resources (surface and ground water)					
Construction/rehabilitation phase:					
Contamination of groundwater due to accidental spill of fuel/oil and/or other technical liquids	X				Y
Lack of on-site sanitary facilities for construction workers causing pollution to surface and groundwater					Y
Dumping of demolition debris or excess soil from land-leveling into watercourses	X				Y
Contaminate surface and/or underground water with nutrients, biological oxygen demand, suspended solids, and pathogens due to improper installation of sewage treatment system					N
Construction/rehabilitation phase:					
Not proper maintenance of sewage treatment					N
Receptor: Air Quality					
IMPACT (Description of effect) and occurrence (construction/operation)					
Construction activities (e.g. emissions from construction machinery, construction waste disposal etc) may increase the level of emission in the air and dust,	X				Y

especially under windy conditions.					
Removal of groundcover, borrow pits, and construction sites, creating conditions for airborne dust and particulates					N
Construction/rehabilitation phase:					
No significant impact on air quality during operation/maintenance					N/A
Receptor: Biodiversity					
IMPACT (Description of effect) and occurrence (construction/operation					
Construction process may cause removal of vegetation cover, changes in land use pattern. Proposed sites have been previously disturbed and utilized for residential use and there are no unique and/or important farmlands.					N
Construction/rehabilitation phase:					
No significant impact on biodiversity during operation/maintenance					N
Community, Socio-Economic, and Public Health (including cultural and historical assets, population, public health, temporary resettlement etc)					
Population					
Construction activities (e.g. construction machinery, traffic and/or possible removal activities) may cause the increase the noise/vibration level during the construction process;			X		Y
Load on the existing roads will increase due to construction machinery. Construction activities cause traffic delays, which affect local population within the vicinity of project;					N

Traffic increase will generate noise, air emissions, and vibration that might impact on community safety, and cause public nuisance;					N
Temporary employment opportunities in the construction activities (beneficial impact)			X		Y
Construction/rehabilitation phase:					
Improvement of livelihoods, including improved standards of living for affected people		X			Y
Public Health					
Construction activities might cause health impact to the workers (e.g. construction related accidents). Also see Air Quality, Population Receptors	X				Y
Inadequate disposal of construction wastes	X				Y
Construction activities may need installing of temporary sanitation facilities at construction sites; inadequate management of this sites could cause negative impact on public health during construction phase			X		Y
Rehabilitated structure may contain asbestos containing material. Improper handling and disposal of hazardous wastes at project site (e.g. asbestos) might cause negative health impact	X				Y
Demolition rubble creating breeding grounds for rats, standing water creating breeding grounds for insect and water-borne diseases					N
Construction/rehabilitation phase:					
Upgrading infrastructure would beneficially impact on		X			Y

public health and decrease level of water borne and/or sewage related diseases;					

Definitions Used in Determining Environmental Risk

Parameter	Rating Categories				
	1	**2**	**3**	**4**	**5**
Scale	Insignificant volume/quantity	Low volume/quantity	Medium volume/quantity	Medium volume/quantity	High volume/quantity
Severity	Minimal impact	Moderate impact but localized and readily containable	Moderate impact over multiple locations	Significant impact and/or regional	Extreme impact and/or potential for global impact
Probability	Very unlikely under any operating condition	Occurs during abnormal/emergency conditions. Probability anticipated and managed	Occurs during routine maintenance activities	Occurs during major maintenance activities	Occurring during normal operating conditions
Duration	Spike situation extremely short-term duration within one day	Less than one month	One to six months	Less than one year	Long-term duration greater than one year or continuous

APPENDIX C: Environmental Site-Screening analysis

Example 1: Kutaisi collective center building Site Screening Analysis

1) General Information

Project Name	Rehabilitation of Collective center Building Address: # 8 Nikea Str., Kutaisi, Georgia
Type of project	Rehabilitation
Location (district / region)	Kutaisi, Imereti Region, Georgia
Ownership (private/state)	State
Surrounding Present Land Use	[ ] Agriculture [ ] Residential [ ] Tourism [ ] Industrial [ ] Forest Land [ ] Institutional [ ] Commercial [ ] Open Spaces [ ] Others, pls. Specify : Urban Environment

2) General Construction Activities

Is there and impact because / to	Construction	Operation and Maintenance
Construction / rehabilitation of structures and buildings?	Yes	No
Construction / rehabilitation of access roads?	No	No
Temporary sites used for construction works or housing of construction workers?	Yes	No
Significant risk associated with waste transport?	Yes	No
Adequate waste disposal facilities?	No	No
Trenching or excavation?	No	No
Require offsite overburden / waste disposal or borrow pits >1.0 ton?	Yes	No
Require the use of dangerous / hazardous substances (e.g. paints, oil, lubricants, chemicals; pls. Specify)?	No	No
Require a collection and disposal system for hazardous waste?	Yes	No
Increase vehicle trips > 20% or cause substantial congestion?	Yes	No
Cause or contribute to safety hazards?	Yes	No
Inadequate access or emergency access for anticipated volume of people or traffic?	No	No
Involve actions that will cause physical changes in the locality (topography, land use, changes in water bodies, etc)?	No	No

3) Geology and Soils

Is there and impact because / to	Construction	Operation and Maintenance
Conducted near geologic hazards (faults, landslides, liquefaction, un-engineered fill, etc)?	No	No
Cause subsidence, landslides or erosion?	No	No
Potential impact to soil – e.g., movement of soil, binding or bonding of soils, compressive strength of soils?	Yes	No
Management of excess soil or spoil material?	No	No
Physical degradation of the local environment (e.g., need for revegetation)?	No	No

4) Water Resources

Is there and impact because / to	Construction	Operation and Maintenance
Flooding or extreme or adverse climatic conditions that might cause a break or malfunction in the system?	No	No
River, stream or lake onsite or within 30 meters of construction?	No	No
Wetlands crossed or affected by the project?	No	No
Quality or quantity of groundwater (aquifers) or public water supplies (e.g., wells)?	Yes	No
Quality or quantity of surface water?	Yes	No
Run-off as a result of the hardening of surfaces, or loss of the sponge effect of vegetation, that might affect sensitive areas?	No	No

5) Biological Resources

Is there and impact because / to	Construction	Operation and Maintenance
Important, high quality or scarce resources that could be affected by the project?	No	No
Located in a Protected Area or Wildlife Corridor?	No	No
Inundate or remove wetland habitats?	No	No
Diversity of plant communities?	No	No
Natural replenishment of existing species?	No	No
Overexploitation of biological resources?	No	No
Vegetation removal or construction in wetlands or riparian areas > 1.0 hectare?	No	No
Use of pesticides / rodenticides, insecticides, or herbicides >	No	No

1.0 hectare?		

6) <u>Socioeconomic Issues</u>

Is there and impact because / to	Construction	Operation and Maintenance
Existing settlements in the vicinity of the proposed project?	Yes	No
Existing land uses on or around the project that could be affected by the project?	No	No
Areas on or around the location of the project that are already subject to pollution or environmental damage?	No	No
Permanent or temporary change in land use, land cover or topography including increases in intensity of land use?	Yes	No
Social infrastructures located in or near the project area (e.g., schools, health centers / clinics, places of worship, others?	No	No
Social acceptability of the project (community, government, non-governmental organizations)?	No	No
Visual and odor effects of waste sites?	Yes	No
Risk to the community and the local environment should the facility break down?	No	No
Potential conflict with adjacent land uses?	No	No
Non-compliance with existing codes, plans, permits or design factors?	No	No
Construction in national park or designated recreational area?	No	No
Relocation of >10 individuals for +6 months?	Yes	No
Interrupt necessary utility or municipal service > 10 individuals for + 6 months?	No	No
Noise levels > 5 decibels for + 3 months?	Yes	No
Adverse visual impact when compared to the surrounding natural landscape?	Yes	No
Affect future land uses on or around the location?	No	No
Are there any areas on or around the location that are densely populated or built-up, which could be affected by the project?	No	No
Highly visible to many people?	No	No
Lead to pressure for consequential project that could have significant impact on the environment (eg more housing, new roads, new supporting industries or utilities, etc)?	No	No
Cumulative effects due to proximity to other existing or planned projects with similar effects?	No	No
Social changes, for example, in demography, traditional	No	No

lifestyles, and employment?		

7) Cultural Issues

Is there and impact because / to	Construction	Operation and Maintenance
Prehistoric, historic, or paleontological resources within 30 meters of construction?	No	No
Unique cultural or ethnic values at the site?	No	No

8) Public Health issues

Will the project affect…	Construction	Operation and Maintenance
human or community health or welfare?	Yes	Yes
The quality or toxicity of air, water, foodstuffs and other products consumed by humans?	Yes	No
Morbidity or mortality of individuals, communities or populations by exposure to pollution?	Yes	No
Occurrence or distribution of disease vectors including insects?	No	Yes
Vulnerability of individuals, communities or populations to disease?	No	No
Individuals' sense of personal security?	No	No
Community cohesion and identity?	No	No
Cultural identity and associations?	No	No
Minority rights?	No	No
Housing conditions?	Yes	No
Employment and quality of employment?	Yes	No
Economic conditions?	No	No
Social institutions?	No	No
Cause accidents that could affect human health or the environment?	No	No
- From explosions, spillages, fires etc?	No	No
- From storage, handling, use or production of hazardous or toxic substances?	Yes	No
Be affected by natural disasters causing environmental damage (e.g floods, earthquakes, landslip, etc)?	No	No
Vulnerable groups of people who could be affected by the project (e.g. hospital patients, the elderly)?	No	No

9) Air Quality

Is there and impact because / to	Construction	Operation and Maintenance
Onsite air pollutant emissions?	Yes	No
Violation of applicable air pollutant emissions or ambient concentration standards?	No	No
Vehicle traffic during construction or operation?	Yes	No
Demolition or blasting for construction?	No	No
Odor during construction or operation?	Yes	No
Release pollutants or any hazardous, toxic or noxious substances to air?	No	No
- Emissions from combustion of fossil fuels from stationary or mobile sources?	Yes	No
- Emissions from materials handling including storage or transport?	No	No
- Emissions from construction activities including plant and equipment?	Yes	No
- Dust or odors from handling of materials including construction materials, sewage and waste?	Yes	No
- Emissions from burning of waste in open air (eg slash material, construction debris)?	Yes	No

10) <u>Noise and Vibration</u>

Is there and impact because / to	Construction	Operation and Maintenance
Noise and vibration or release of light, heat energy or electromagnetic radiation?	Yes	No
- From operation of equipment (e.g. engines, ventilation plant, crushers)?	Yes	No
- From construction or demolition?	Yes	No
- From blasting or piling?	No	No
- From construction or operational traffic?	Yes	No
- From sources of electromagnetic radiation?	No	No

Example 2: Akhalsofeli IDP Settlement Site Screening Analysis

1) General Information

Project Name	Providing on-site sewage system in Akhalsofeli Settlement; Constructing the storage facilities and outdoor bath and toilet facilities
Type of project	New Construction
Location (district / region)	Akhalsofeli IDP Settlement, Shida Kartli Region, Georgia
Ownership (private/state)	
Surrounding Present Land Use	[X] Agriculture [X] Residential [ ] Tourism [ ] Industrial [ ] Forest Land [ ] Institutional [ ] Commercial [ ] Open Spaces [ ] Others, pls. Specify :

2) General Construction Activities

Is there and impact because / to	Construction	Operation and Maintenance
Construction / rehabilitation of structures and buildings?	Yes	No
Construction / rehabilitation of access roads?	No	No
Temporary sites used for construction works or housing of construction workers?	Yes	No
Significant risk associated with waste transport?	No	No
Adequate waste disposal facilities?	No	No
Trenching or excavation?	Yes	No
Require offsite overburden / waste disposal or borrow pits >1.0 ton?	Yes	No
Require the use of dangerous / hazardous substances (e.g. paints, oil, lubricants, chemicals; pls. Specify)?	No	No
Require a collection and disposal system for hazardous waste?	No	No
Increase vehicle trips > 20% or cause substantial congestion?	Yes	No
Cause or contribute to safety hazards?	Yes	No
Inadequate access or emergency access for anticipated volume of people or traffic?	No	No
Involve actions that will cause physical changes in the locality (topography, land use, changes in water bodies, etc)?	Yes	No

3) Geology and Soils

Is there and impact because / to	Construction	Operation and

		Maintenance
Conducted near geologic hazards (faults, landslides, liquefaction, un-engineered fill, etc)?	No	No
Cause subsidence, landslides or erosion?	No	No
Potential impact to soil – e.g., movement of soil, binding or bonding of soils, compressive strength of soils?	Yes	No
Management of excess soil or spoil material?	Yes	No
Physical degradation of the local environment (e.g., need for revegetation)?	Yes	No

4) <u>Water Resources</u>

Is there and impact because / to	Construction	Operation and Maintenance
Flooding or extreme or adverse climatic conditions that might cause a break or malfunction in the system?	No	No
River, stream or lake onsite or within 30 meters of construction?	No	No
Wetlands crossed or affected by the project?	No	No
Quality or quantity of groundwater (aquifers) or public water supplies (e.g., wells)?	Yes	No
Quality or quantity of surface water?	No	No
Run-off as a result of the hardening of surfaces, or loss of the sponge effect of vegetation, that might affect sensitive areas?	No	No

5) <u>Biological Resources</u>

Is there and impact because / to	Construction	Operation and Maintenance
Important, high quality or scarce resources that could be affected by the project?	No	No
Located in a Protected Area or Wildlife Corridor?	No	No
Inundate or remove wetland habitats?	No	No
Diversity of plant communities?	No	No
Natural replenishment of existing species?	Yes	No
Overexploitation of biological resources?	No	No
Vegetation removal or construction in wetlands or riparian areas > 1.0 hectare?	No	No
Use of pesticides / rodenticides, insecticides, or herbicides > 1.0 hectare?	No	No

6) Socioeconomic Issues

Is there and impact because / to	Construction	Operation and Maintenance
Existing settlements in the vicinity of the proposed project?	No	No
Existing land uses on or around the project that could be affected by the project?	No	No
Areas on or around the location of the project that are already subject to pollution or environmental damage?	No	No
Permanent or temporary change in land use, land cover or topography including increases in intensity of land use?	Yes	No
Social infrastructures located in or near the project area (e.g., schools, health centers / clinics, places of worship, others?	No	No
Social acceptability of the project (community, government, non-governmental organizations)?	No	No
Visual and odor effects of waste sites?	Yes	No
Risk to the community and the local environment should the facility break down?	No	No
Potential conflict with adjacent land uses?	No	No
Non-compliance with existing codes, plans, permits or design factors?	No	No
Construction in national park or designated recreational area?	No	No
Relocation of >10 individuals for +6 months?	Yes	No
Interrupt necessary utility or municipal service > 10 individuals for + 6 months?	No	No
Noise levels > 5 decibels for + 3 months?	Yes	No
Adverse visual impact when compared to the surrounding natural landscape?	Yes	No
Affect future land uses on or around the location?	No	No
Are there any areas on or around the location that are densely populated or built-up, which could be affected by the project?	Yes	No
Highly visible to many people?	Yes	No
Lead to pressure for consequential project that could have significant impact on the environment (eg more housing, new roads, new supporting industries or utilities, etc)?	No	No
Cumulative effects due to proximity to other existing or planned projects with similar effects?	No	No
Social changes, for example, in demography, traditional lifestyles, and employment?	No	No

7) Cultural Issues

Is there and impact because / to	Construction	Operation and Maintenance
Prehistoric, historic, or paleontological resources within 30 meters of construction?	No	No
Unique cultural or ethnic values at the site?	No	No

8) Public Health issues

Will the project affect…	Construction	Operation and Maintenance
human or community health or welfare?	Yes	No
The quality or toxicity of air, water, foodstuffs and other products consumed by humans?	Yes	No
Morbidity or mortality of individuals, communities or populations by exposure to pollution?	No	No
Occurrence or distribution of disease vectors including insects?	Yes	No
Vulnerability of individuals, communities or populations to disease?	No	No
Individuals' sense of personal security?	No	No
Community cohesion and identity?	No	No
Cultural identity and associations?	No	No
Minority rights?	No	No
Housing conditions?	No	No
Employment and quality of employment?	Yes	No
Economic conditions?	No	No
Social institutions?	No	No
Cause accidents that could affect human health or the environment?	Yes	No
- From explosions, spillages, fires etc?	No	No
- From storage, handling, use or production of hazardous or toxic substances?	No	No
Be affected by natural disasters causing environmental damage (e.g floods, earthquakes, landslip, etc)?	No	No
Vulnerable groups of people who could be affected by the project (e.g. hospital patients, the elderly)?	No	No

9) Air Quality

Is there and impact because / to	Construction	Operation and Maintenance

Onsite air pollutant emissions?	Yes	No
Violation of applicable air pollutant emissions or ambient concentration standards?	No	No
Vehicle traffic during construction or operation?	Yes	No
Demolition or blasting for construction?	No	No
Odor during construction or operation?	Yes	No
Release pollutants or any hazardous, toxic or noxious substances to air?	Yes	No
- Emissions from combustion of fossil fuels from stationary or mobile sources?	Yes	No
- Emissions from materials handling including storage or transport?	Yes	No
- Emissions from construction activities including plant and equipment?	Yes	No
- Dust or odors from handling of materials including construction materials, sewage and waste?	Yes	No
- Emissions from burning of waste in open air (eg slash material, construction debris)?	No	No

10) <u>Noise and Vibration</u>

Is there and impact because / to	**Construction**	**Operation and Maintenance**
Noise and vibration or release of light, heat energy or electromagnetic radiation?	Yes	No
- From operation of equipment (e.g. engines, ventilation plant, crushers)?	Yes	No
- From construction or demolition?	Yes	No
- From blasting or piling?	No	No
- From construction or operational traffic?	Yes	No
- From sources of electromagnetic radiation?	No	No

APPENDIX D: Stakeholder Meeting Report

Stakeholder Meeting Report

Background:

In order to stimulate rural economic development and improve livelihoods of vulnerable populations, USAID signed agreement with Government of Georgia which aims to: 1) develop and rehabilitate municipal infrastructure, including irrigation channels in at least five municipalities affected by the 2008 conflict; 2) assist over 80 local communities to prepare and implement community development and 3) upgrade the existing shelters constructed by the GoG for IDP's from the 2008 conflict, redevelop buildings for use as durable housing for IDPs from previous conflicts, and ensure overall sustainability of housing solutions.

In scope of this agreement, USAID intends to assist the Government of Georgia (GoG) through the Municipal Development Fund (MDF) to rehabilitate housing and infrastructure under its planned 'Internally Displaced Persons (IDP) Durable Housing Project'. IDP Housing Project is divided in two components: a) provide water and sanitation upgrades for IDP cottage housing for IDPs from August 2008 war and b) Provide durable housing solutions for IDPs from 1990 conflict.

The IDP Housing Project prepares basic technical studies to evaluate the technical and economical feasibility of proposed IDP housing projects and Scoping Statement for Programmatic Environmental Assessment. The result of technical/economical feasibility of Teliani IDP settlement was positive (it was identified that buildings were structurally intact and rehabilitation activities were technically and economically feasible). As part of this process the stakeholder meeting was held in Teliani IDP Settlement of Kaspi Municipality to ensure IDP's involvement at the early planning stage, identify areas of IDP's concern regarding the planned activity, and gather feedback from IDP's.

Aim of the Stakeholder meeting:

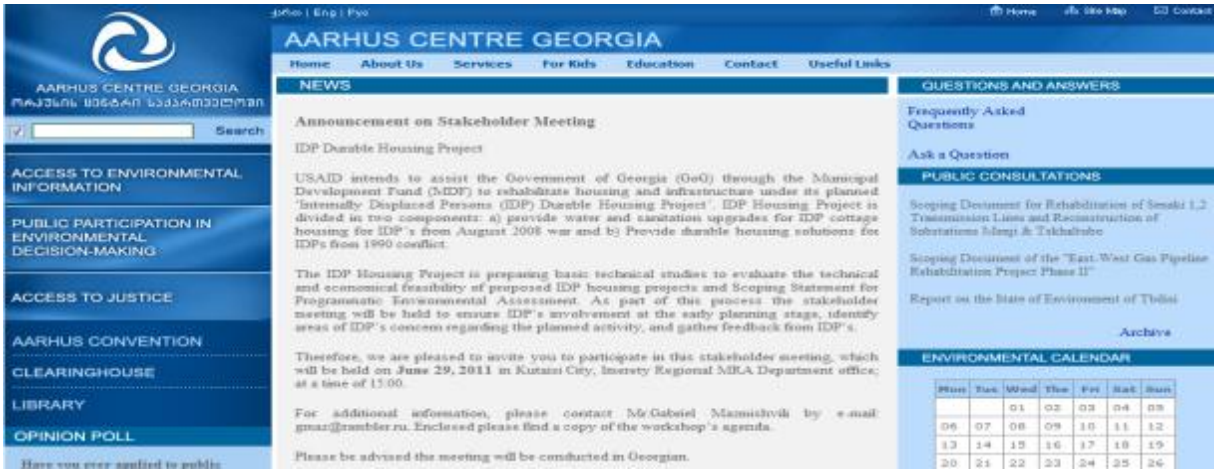
- To inform local community the goal of the project and ensure their involvement at the early planning stage;
- Identify community social and environmental concerns regarding the development of the project and gain their feedback;
- Ensure positive attitude towards the project and increase cooperation perspectives between IDP's and project developers.

Stakeholder Meeting Process:

The purpose of the meetings was to provide information and get the opinions of the locals related to the project.

Public Notice:

A notice/advertisement on the planned stakeholder meeting was distributed through internet (CENN's mailing list and Aarhus Centers web page: www.aarhus.ge). Most IDP's have not access on internet sources, thus the notice on the meeting were placed prominently on public noticed boards in the IDP settlements. The date, place and the scope of the meeting was preliminary informed and agreed with Kaspi and Kutaisi Municipalities and with MRA. The MRA and local municipality were asked for participation on the meeting. The stakeholder meeting advertisement is provided below.



Stakeholder Meeting Venue:

Stakeholder meeting was held in a place convenient to IDP's. The venue selected was the meeting facility at Teliani IDP settlement of Kaspi Municipality and the meeting facility at Kutaisi City called Association Kutaiseli.

Table1: Meeting Venue

Location	Date/Time
Teliani IDP Settlement	23 June, 2011 / 11:00
Kutaisi City; meeting facility called Association Kutaiseli.	29 June, 2011 / 15:00

Attendees:

- USAID;
- Municipal Development Fund (MDF), TETRA TECH, Ltd GEO;

- Ministry of Refugees Ministry of Internally Displaced Persons from the Occupied Territories, Accommodation and Refugees of Georgia;
- Local Government/Kaspi Municipality ;
- Local Government/Kutaisi Municipality;
- Teliani IDP and Kutaisi IDP representatives;
- World Vision;
- CHF Georgia;
- Georgian Yang Lawyers Association
- Danish Refugee Council;
- During Kutaisi IDP stakeholder meeting TV shots were aired by the local Imereti broadcasting channel RIONI.

Documentation and Handouts:
Following documents were provided during the meeting:

Table 2: Meeting Documentation and Handouts

No:	Document/Handout	Comment
1	Agenda	hard copies for each participant
2	Registration of participants	1 copy for signatures
3	Presentation in Georgian	8 hard copies
4	Questionnaire	hard copies for each participant

Mariam Bakhtadze, environmental specialist of Ltd GEO introduced the representatives of USAID, Tetra Tech and MDF to the meeting participants and explained the purpose of the meeting. Totally, 65 people attended both stakeholder meetings.

During the meeting, the Ltd. GEO team members provided information about the project in general, and discussed technical characteristics of the proposed IDP Durable Housing Project as well as possible environmental and social impact. The Ltd. GEO team stressed the importance of public participation in the early project design phase. Participants have been asked to express their opinion/attitude towards the project in general as well as impact on environment and socio-economic conditions of their household.

The project technical outlines and questionnaire specially developed for the meeting were used as supportive documentation. A stakeholder meeting questionnaire listed some of the issues which need urgent solving for the IDP settlement. The meeting participants were asked to fill the questionnaire and evaluate it according the scheme provided in the form. Most issues identified in the questionnaire were considered important by the IDPs. Table below shows the summary of results.

Table 3: Results of the Questionnaire for Teliani IDP Settlement

Issues listed in questionnaire	Importance			
	Very Important	Important	Less Important	Least Important
Installing On-Site Sewage Facility for IDP Settlement	97%	3%	-	-
Building the storage facility	99%	1%	-	-
Rehabilitate the existing water pipes	79%	10%	9%	2%
Providing building insulation for cottage buildings	87%	11%	2%	-
Installing garbage cans	78%	10%	9%	3%

Table 4: Results of the Questionnaire for Kutaisi IDP

Issues listed in questionnaire	Importance			
	Very Important	Important	Less Important	Least Important
Rehabilitate Building	100%	-	-	-
Provide alternative option for living usage	-	-	-	100%
Rehabilitate sewage system	99%	1%	-	-
Rehabilitate the existing water pipes	98%	1,5%	0.5%	-
Rehabilitate internal electricity system	97%	2%	1%	-
Installing garbage cans	96%	3%	1%	-
Providing building play grounds for children	99%	1%	-	-

Participants were very active during the events, asking questions and providing suggestions. In the questionnaire forms, in the comments section some of the participants highlighted the need for the medical center and kindergarten in the Teliani IDP settlement.

Concerns expressed by IDPs and/or meeting attendees were recorded and provided below:

Q&A Session in Teliani Settlement:

After presenting the slideshow presentation of IDP Durable Project to the stakeholders, the meeting went into the interactive phase. Stakeholders were asked to raise the questions and make their comments. Below are the questions and comments highlighted during the meeting:

Q: Why the common bath does not operate? (Question asked by resident of Teliani settlement)
A: Since Mr. Namoridze participated in the bath constriction works, founded by the EC and implemented by UNDP, he gave brief information to the IDP about technical issues. He explained that from engineering point of view works were completed successfully and problem of not operation is related to the ownership. Initially it was planned to hand over the common bath to the local municipality, but issue still is not closed since local municipality is not sure of taking the ownership. Mr. Namoradze offered the option of establishing the legal community of locals and transfer ownership to them.

Mr. Ilia Eloshvili (TETRA TECH) made clear that issues related to the operation of common bath are out of the scope of IDP Durable Project. But he promised to residents of Teliani settlement that the IDP Durable Project will ensure that case is discussed with representatives of Local Municipality.

Q: Do the residents agree on constriction of shower and toilet facilities on the border of two adjacent cottages? (Question asked by Mr.Tamaz Namoradze)
A: Residents of Teliani settlement expressed their satisfaction with the offer.

Q3: Does the project ensure building of storages for each cottage? (Question asked by the resident of Teliani settlement)
A: LTD GEO Environmental team stated that the project will prioritize issues based on questioners filled by residents during the meeting. If majority of residents marks the storage construction as high priorities issue it will be taken into account during implementation phase of the project.

Other Comments:
During the interactive phase of the meeting several significant issues were discussed:

- Residents of Teliani settlement stated their concern about storage facilities and facilities for domestic animals. As majority of residents are unemployed their mostly depend on agricultural production. There is no storage facility for crops and harvest that has significant impact on social-economic condition of residents.

- Teliani residents raised the issue of building the facilities for domestic animals.

Teliani settlement residents asked to clean the drain channels, which are blocked and make unsanitary conditions. As well as, the issue of waste collection was disposal discussed, people requested installation of waste bins.

Q&A Session in Kutaisi stakeholder meeting:

Q: What is the period for rehabilitation is it one year or more?
A: Currently project studies technical and economical feasibility proposed buildings and recommends the feasibility of building rehabilitation works. Based on feasibility study findings, program will identify certain number of buildings adequate for rehabilitation purposes (buildings with weak structural integrity will be excluded from funding support). Next step is exact design of the buildings which will be followed by rehabilitation works.

Q: Will the rehabilitation of the buildings improve internal communications (e.g. gas, electricity)?
A: The rehabilitation project is precisely aimed to improve the existing situation. The project is responsible for the rehabilitation of the internal communications as well. Adequate housing will be ensured per standards and regulations developed by MRA.

Q: What were the criteria's for selection of the projects (buildings for rehabilitation)?
A: Buildings for rehabilitation were selected by MRA.

Q: How open is information about the project and how can public access the project related information?
A: Project information will be uploaded on Municipal Development Funds (MDF's) web page. Besides, project developers believe that one of the criteria of successful implementation of project is stakeholder's involvement at early planning, development and monitoring stages. Hence, public meetings with all stakeholders will be continued during the project development stage.

Q: Will there be an employment opportunities for the locals?
A: IDP Durable Housing Project is not able to oblige contractors in terms of employment issues, but based on existing experience, most of the contractors are hiring unskilled (and other) labor force from local settlements during the construction works.

Additional Statements

Mr. Gia Tevdoradze, (Mayor of Kutaisi) expressed gratitude to US Government and MDF for the great support provided in infrastructure development projects in Georgia. He mentioned that Kutaisi city municipality is planning improve drinking water supply systems by 2013. It means that Kutaisi population will have 24 hour drinking water supply. It requires replacement of existing water pipes with new ones. This should be taken into account during project rehabilitation process.